InRouter 700 Series User's Manual

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InRouter 700 Series User's Manual

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I

Introduction to InRouter 700 Series

- ◆ Overview
- Product Models
- Product Features & Specifications
- Package Checklist

1.1 Overview



InRouter 700 series industrial grade routers provide users with stable and high speed connection between remote devices and customer's center via 2.5G/3G networks. They allow wide voltage power supply (9-48V DC), large range operating temperature from -25°C to 70°C (- $10 \sim 158F$)/ humidity: 95% RH, and fully satisfy various EMC verifications, which ensure stability and reliability under harsh industrial conditions. The InRouter 700 can be placed on a desktop or DIN-mounted.

InRouter 700 series products support VPN (IPSec/PPTP/ L2TP/GRE/SSL VPN), which create high-security links between remote equipment and customer's center.

In Addition, InRouter 700 series products support the Device Manager remote device manage platform, which realizes remote operation including remote control, remote monitor, parameters configure, firmware upgrade, log/alarm management, information statistics/display, batch configuration/update and etc.

1.2 Package Checklist

We put each InRouter 700 cellular router in a box with standard accessories. Additionally, there're optional accessories can be ordered. When you receive our package, please check carefully, and if there're items missing or appearing to be damaged, please contact with your InHand Networks sales representative.

Items in package include:

Standard Accessories:

Accessories	Description
InRouter 700 Serials Wireless Router	1
Cable	1 Cross line,CAT-5,1.5M
Document and Software CD	1
Antenna	5m Cellular Antenna
Power Supply	
	Power Adapter, 100-265V AC in, 12V DC out (included in IR7xx)
	Power plug, American Standard (included in IR7xx)

Optional Antennas:

Picture	Туре	Description				
2.		GPRS Quad-band				
00	GSM/GPRS Cellular Antennas	(included in IR7xxGS55)				
9						
N 2	UMTS/HSDPA/WCDMA Cellular	WCDMA Quad-band				
	Antennas	(included in IR7xxWH01)				
		WCDMA Quad-band				
-6	Anti-thief antenna	(Optional for IR7xxWH01)				
,						
		WCDMA Quad-band				
*	Stick antenna	(Optional for IR7xxWH01)				
1						
		WCDMA Quad-band				
The state of the s	Anti-thief antenna	(Optional for IR7xxWH01)				

1.3 Product Features

1.3.1 Interfaces

WAN

Cellular WAN:

Standards: GSM/GPRS

Band Options:

HSUPA /HSDPA/WCDMA 850/900/1900/2100MHz GSM/GPRS/EDGE 850/900/1800/1900MHz

Ethernet WAN:

Ethernet: 10/100 Mbps, RJ45 connector, Auto MDI/MDIX

Magnetic Isolation Protection: 1.5 KV built-in

LAN

IR701/711/791:

Number of Ports: 1

Ethernet: 10/100 Mbps, RJ45 connector, Auto MDI/MDIX

Magnetic Isolation Protection: 1.5 KV built-in

IR704/714/794:

Number of Ports: 4

Ethernet: 10/100 Mbps, RJ45 connector, auto MDI/MDIX

Magnetic Isolation Protection: 1.5 KV built-in

Serial:

A. Serial Type: RS232/485

B. Data bit: 5/6/7/8C. Stop bit: 1/2D. Check bit: N/O/D

E. Baud rate: 1,200bit/s~ 115,200bit/s

SIM Interface

SIM Control: 3 V

1.3.2 Functions

PPP

Supported VPDN/APN, fast access to virtual private dial-up network (VPDN) provided by mobile operator, ensure high-security data transmission.

Support PPPoE (Point to Point Protocol over Ethernet) Protocol.

Support CHAP/PAP/MS-CHAP/MS-CHAP V2 authorization

Support Connection Detection, auto-recovery, auto-link, ensure reliable communication.

Support On-demand connection, SMS Activity

Dynamic IP

Support DHCP, applied as Server/Client

Dynamic DNS

Support Dynamic DNS-IP Binding

Flux Management

Support rate limiting,

Firewall Function

Package filtering

Port Mapping

Virtual Address Mapping

DMZ zone

MAC addresses binding.

Route function

Support Static Routing Table

VPN (not available for IR701/704)

IPSec VPN

L2TP VPN

PPTP VPN

GRE

SSL VPN (for IR791/794 only)

Link Backup

VRRP

Support VRRP protocols, realizing immediate link backup

Hot Link Backup (for IR704/714/794 only)

Support Wireless Hot Link Backup for cable link via only one device

DNS Forwarding

Support DNS Forwarding, support DNS record

Network tools

Support Ping, Trace Route and Telnet

1.3.3 Environmental Limits

Operating Temperature: -25 to 70°C (-10 to 158°F)

Operating Humidity: 5 to 95% RH

Storage Temperature: -40 to 85°C (-40 to 167°F)

1.3.4 Power Requirements

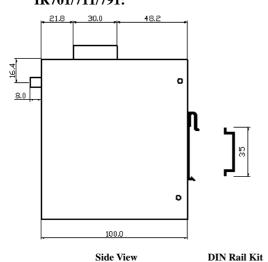
Power Inputs: 1 terminal block, including power jack and serial.

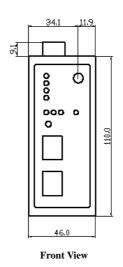
Input Voltage: 9 -48 VDC

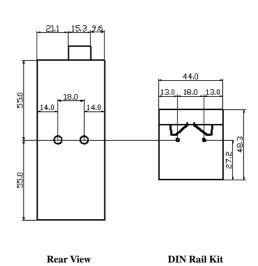
1.3.5 Physical Characteristics

Housing: Steel, providing IP30 protection

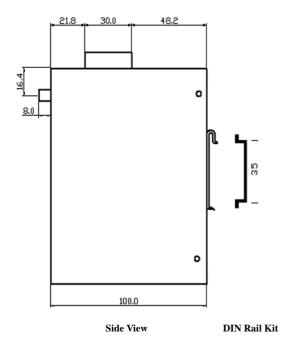
Weight: 490g Dimensions (mm) IR701/711/791:

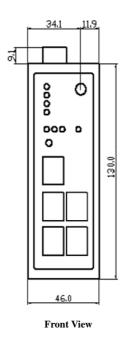


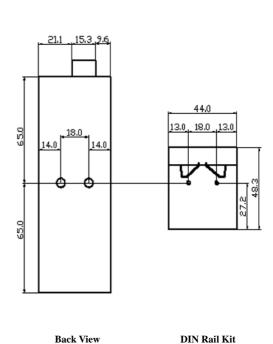




IR704/714/794:







1.3.6 Advanced Industrial Features

Physical Characteristics

Housing: Metal, IP30

EMC Features

ESD: EN61000-4-2, level 4 **Surge:** EN61000-4-5, Level 3

Electric Fast Transient/burst: EN61000-4-4, Level 4

RF Electromagnetic Field Immunity: EN61000-4-3, Level 3

RF conducted interference: EN61000-4-6, Level 3 **Damped oscillation Immunity**: EN61000-4-12, Level 3

Power-frequency electromagnetic fields Immunity: EN61000-4-8, Level 5

Anti-shock: IEC60068-2-27

Drop: IEC60068-2-32 **Vibration**: IEC60068-2-6

1.3.7 Device Management Software

Device Manager:

Centralized management solution for InHand Networks Devices

1.3.8 Warranty

Warranty Period: 1 year

1.4 Product Models

The current models of InRouter 700 Series include: InRouter 701/711/791GS55, InRouter 701/711/791WH01, InRouter 704/714/794WH01.

The models are classified according to main difference including cellular network, VPN support and interface for device.

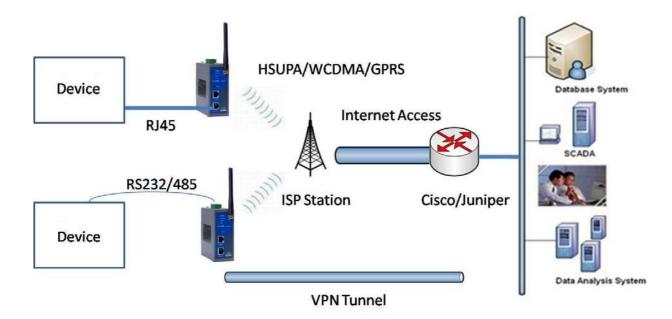
Model	Serial	LAN	Cellular WAN	Ethernet WAN	VPN	CA X.509 base64
GPRS						
IR701GS55	RS232/485	1 RJ45	GSM/GPRS 850/ 900/1800/1900 MHz	N/A	N/A	N/A
IR711GS55	RS232/485	1 RJ45	GSM/GPRS 850/ 900/1800/1900 MHz	N/A	IPSec/PPTP/L2TP/GRE	N/A
IR791GS55	RS232/485	1 RJ45	GSM/GPRS 850/ 900/1800/1900 MHz	N/A	IPSec/PPTP/L2TP/GRE/SSL	Support
UTMS						
IR701WH01	RS232/485	1 RJ45	HSUPA /HSDPA/WCDMA: 850/900/1900/2100MHz GSM/GPRS/EDGE: , 850/900/1800/1900MHz	N/A	N/A	N/A
IR711WH01	RS232/485	1 RJ45	HSUPA /HSDPA/WCDMA: 850/900/1900/2100MHz GSM/GPRS/EDGE: , 850/900/1800/1900MHz	N/A	IPSec/PPTP/L2TP/GRE	N/A
IR791WH01	RS232/485	1 RJ45	HSUPA /HSDPA/WCDMA: 850/900/1900/2100MHz GSM/GPRS/EDGE: , 850/900/1800/1900MHz	N/A	IPSec/PPTP/L2TP/GRE/SSL	Support
IR704WH01	RS232/485	4 RJ45	WCDMA/HSUPA 850/900/1900/2100MHz	ADSL/DHCP/ PPPoE/Static IP	N/A	N/A
IR714WH01	RS232/485	4 RJ45	WCDMA/HSUPA 850/900/1900/2100MHz	ADSL/DHCP/ PPPoE/Static IP	IPSec/PPTP/L2TP/GRE	N/A
IR794WH01	RS232/485	4 RJ45	WCDMA/HSUPA 850/900/1900/2100MHz	ADSL/DHCP/ PPPoE/Static IP	IPSec/PPTP/L2TP/GRE/SSL	Support
USB Modem						
IR701UE	RS232/485	1 RJ45	USB Modem	N/A	N/A	N/A
IR711UE	RS232/485	1 RJ45	USB Modem	N/A	IPSec/PPTP/L2TP/GRE	N/A
IR791UE	RS232/485	1 RJ45	USB Modem	N/A	IPSec/PPTP/L2TP/GRE/SSL	Support
IR704UE	RS232/485	4 RJ45	USB Modem	ADSL/DHCP/ PPPoE/Static IP	N/A	N/A
IR714UE	RS232/485	4 RJ45	USB Modem	ADSL/DHCP/ PPPoE/Static IP	IPSec/PPTP/L2TP/GRE	N/A
IR794UE	RS232/485	4 RJ45	USB Modem	ADSL/DHCP/ PPPoE/Static IP	IPSec/PPTP/L2TP/GRE/SSL	Support

II

Quick Installation Guide

- ◆ Typical Application
- Panel Layout
- Quick Connect to Internet
- ◆ Quick IPSec VPN Configuration
- Reset to Factory Defaults

2.1 Typical Application



InRouter 700 series can be used to connect your device (with RS232/485/Ethernet Interface) to internet via GPRS/HSUPA cellular. Meanwhile, to ensure the security and access, InRouter 700 series support VPN, enabling remote access and secure data transmission through internet.

2.2 Panel Layout

IR701/711/791:



IR704/714/794:



Interface	Description
Power Interface	Access 9-48 V DC Power Supply
Serial	Access to the serial line, realizing
	One 10/100Base-TX RJ45 Port (IR701/711/791GS55, IR701/711/791WH01,
Ethernet Ports	IR701/711/791UE)
	Four 10/100Base-TX RJ45 Ports, (IR704/714/794UE, IR704/714/794WH01)
ANTENNA	2.5G/3G antenna
SIM Card Connector	Put SIM card

Description of LED

Description	POWER	STATUS	WARN	ERROR
	RED	GREEN	YELLOW	RED
Power on	On	On	On	Off
Power on succeed	On	Flash	On	Off
Dialing up to internet	On	Flash	Flash	Off
Dial up succeed	On	Flash	Off	Off
Upgrading	On	Flash	Flash	Flash
Succeed to restore factory settings	On	Flash	On	Flash

Signal Status LED Description

LED 1	LED 2	LED 3	Description	
On	Off	Off	Off Signal: 1-9 (bad signal level, route cannot work, please che	
			the antenna and local signal level)	
On	On	Off	Signal: 10-19 (Router work normally under this signal level)	
On	On	On	Signal: 20-31 (Perfect Signal Level)	

2.3 Quick Connection to Internet

2.3.1 Insert SIM Card



Open InRouter SIM/UIM card case at the button, insert the SIM card and close the case.



For the external USB modem type, insert the USB card into the USB port.

2.3.2 Antenna Installation

After install the IR700, connect the interface of enhanced antenna and the interface of skin antenna and screw closely. Put the amplifier of enhanced antenna to where there receives good signal.

Attention: The position and angle may influence the quality of signal.

2.3.3 Power Supply

Link the power supply in the product package with InRouter, watch where the InRouter Power LED on the panel is light up. If not, please connect with InHand for technical supports.

You can configure IR700 after the Power LED lights up.

2.3.4 Connect

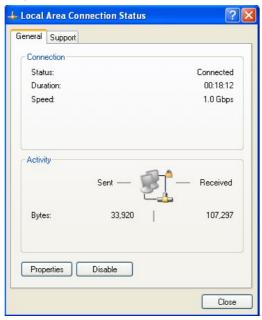
Link the IR700 with PC:

- (1) Using the cable to link IR700 with PC;
- (2) After the connection, you can see one LED of RJ45 Interface turns green and the other flashes.

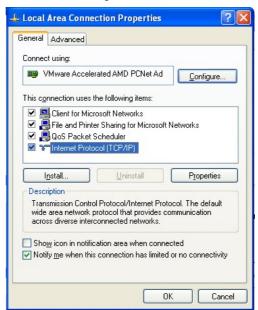
2.3.5 First Connect InRouter with Your PC

InRouter700 Router can auto-distribute IP address for PC. Please set the PC to automatically obtain IP address via DHCP. (Based on the Windows operation system):

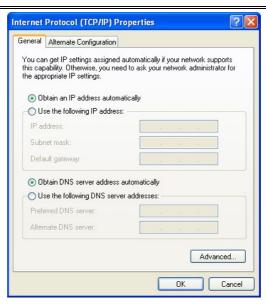
- 1) Open "Control Panel", double click "Network Connections" icon, and enter "Network Connections" Screen.
- 2) Double click "Local Area Connection", enter "Local Area Connection Status" screen:



3) Click "Properties", enter "Local Area Connection Properties" screen



Choose "Internet Protocol (TCP/IP)", click "properties" button, ensure your PC can obtain IP and DNS address automatically. (Or you can set your PC in the subnet: 192.168.2.0/24, for example, set IP: 192.168.2.10, Net Mask: 255.255.255.0, Default Gateway: 192.168.2.1)



Click "OK", InRouter will allocate an IP address: 192.168.2.X, and a gateway: 192.168.2.1(the default address of IR700).

After configure TCP/IP protocols, you can use ping command to check whether the link between PC and Router is built correctly. There is an example to execute Ping command under Windows XP as below:

Ping 192.168.2.1

If the screen shows:

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\inhand\ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Reply from 192.168.2.1: bytes=32 time=1ms TTL=128

Reply from 192.168.2.1: bytes=32 time=1ms TTL=128

Reply from 192.168.2.1: bytes=32 time=1ms TTL=128

Reply from 192.168.2.1: bytes=32 time<1ms TTL=128

Reply from 192.168.2.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Documents and Settings\inhand\ping 192.168.2.1
```

Then the link between the PC and Router is correct connected. Else if it shows:

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\inhand>ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Request timed out.

Request timed out.

Request timed out.

Request timed out.

Ping statistics for 192.168.2.1:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Documents and Settings\inhand>
```

Then the connection seems not build, and you need to check thoroughly following the former instructions.

2.3.6 Start to configure your InRouter 700(Optional)

After you have finished the former steps, you can configure the Router:

1) Open IE browser, input the default IP address of the Router: http://192.168.2.1, you can see the login web below:



Input "username" (default: adm) and the "password" (default: 123456), and then click "login" to enter the operation screen.

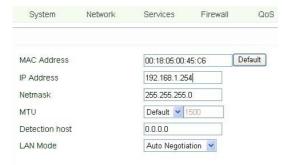
2) Change the IP configuration:

Attention: After configuration, please click "apply" to activate your configuration.

If you want to set your own IP of InRouter 700, please follow the instructions below:



Click "Network"=>"LAN", change the IP address to 192.168.1.254:



3) Click "Apply", then you will see:

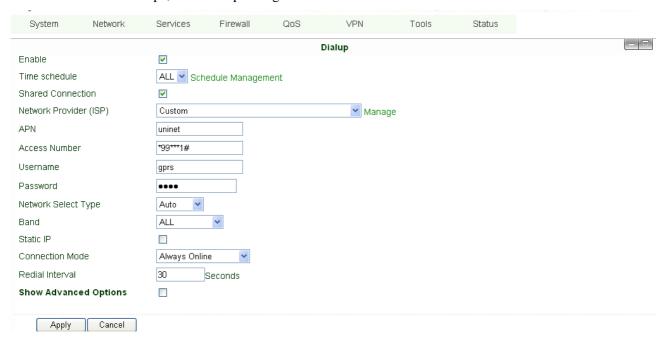


Now the IP address of IR700 has been reset, and in order to enter the configuration web, you need set your PC in the same subnet, for example: 192.168.1.10/24 then input the changed IP address (192.168.1.254) in your IE Browser.

2.3.7 Connect InRouter with Internet

Following the configuration steps below to enable IR700 to connect with the internet.

Click "Network"=>"Dialup", enter dialup configuration web:



Please check the APN, Dialup Number, Username and Password:

Dialup Number, Username and Password are provided by local mobile operator. You can contact them for more details. The following example shows parameters provided by China Mobile, Vodafone and Cingular. Please contact with local operator for details.

1: China Mobile

APN: CMNET

Phone Number: *99#

User Name: web
Password: web

2: Vodafone

APN: internet

Phone Number: *99#

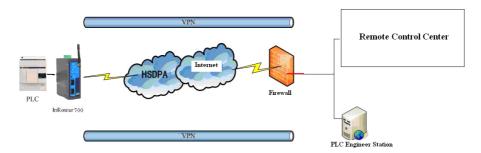
User Name: web
Password: web

After correct configuration, InRouter 700 can now connect with Internet. Open IE Browser, input www.google.com, you can see the Google web as below:

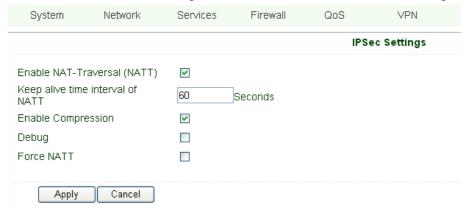


2.4 Quick IPSec VPN Configuration

If you need to build a VPN tunnel to realize access to your PLC far away through internet or you need ensure the security by using VPN. Here's a quick configuration guide of IPSec for InRouter 700 Series.



Connect PC with Router to enter router configuration web, select "VPN" => "IPSec setting":



Enable NAT-Traversal (NATT): select enable.

Keep alive time interval of NATT: set the "Keep alive time interval of NATT", default is 60 seconds.

Enable Compression: select enable.

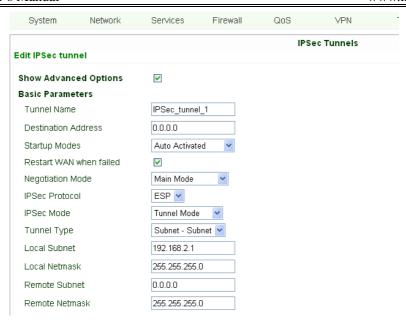
Please change the parameters according to concrete situation.

Click "Apply" to finish configuration.

1) Select "VPN"=> "IPSec Tunnels" to check or modify parameters of IPSec Tunnels.



Click "Add" to add a new IPSec Tunnel:



Basic Parameters: set basic parameters of IPSec tunnel.

Tunnel Name: name IPSec tunnel, the default is IPSec_tunnel_1.

Destination Address: set to VPN server IP/domain, e.g.: the domain provided by GJJ is gjj-ovdp.3322.org.

Startup Modes: select Auto Activated.

Negotiation Mode: optional between Main Mode and Aggressive Mode. Generally, select Main Mode.

IPSec Protocols: optional among ESP, AH. Generally, select ESP.

IPSec Mode: optional between Tunnel Mode and Transport Mode. Generally, select Tunnel Mode.

Tunnel Type: optional among Host-Host, Host-Subnet, Subnet-Host and Subnet-Subnet.

Local Subnet: IPSec local subnet protected. E.g.: 172.16.16.0.

Local Net Mask: IPSec local Net Mask protected. E.g.: 255.255.255.252.

Remote Subnet: IPSec remote subnet protected. E.g.: 172.16.0.0.

Remote Net Mask: IPSec remote Net Mask protected. E.g.: 255.240.0.0.

Phase 1 Parameters: configure parameters during the Phase 1 of IPSec negotiation.

IKE Policy: optional between 3DES-MD5-96 and AES-MD5-96, suggest selecting 3DES-MD5-96.

IKE Lifetime: the default is 86400 seconds.

Local ID Type: optional among FQDN, USERFQDN, IP address, suggest selecting IP address.

Remote ID Type: optional among FQDN, USERFQDN, IP address, suggest selecting IP address.

Authentication Type: optional between Shared Key and Certificate, generally choose Shared Key.

Key: set IPSec VPN negotiating key.

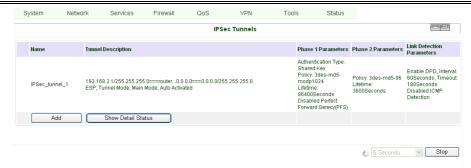
Phase 2 Parameters: configure parameters during the Phase 2 of IPSec negotiation.

IPSec Policy: optional between 3DES-MD5-96 and AES-MD5-96, suggest selecting 3DES-MD5-96.

IPSec Lifetime: the default is 3600 seconds.

Perfect Forward Encryption: Optional among None, GROUP1, GROUP2 and GROUP5. This parameter should match with the server, generally, select "None".

Click "Save" to finish adding IPSec Tunnel:



You can click "Show Detail Status" to observe the specific connection details, or click "Add" to add a new tunnel. Now you succeed to build a high-security IPSec tunnel, here's an example:

We set an IPSec Tunnel from subnet: 192.168.220.0/24 to subnet: 192.168.123.0/24, when it succeeds, the web will show:



And the PC in IPSec client subnet can get access to the server's subnet.

Open command in your PC, then ping a PC in the server's subnet:

```
C:\Documents and Settings\Jason Hu>ping 192.168.123.250

Pinging 192.168.123.250 with 32 bytes of data:

Reply from 192.168.123.250: bytes=32 time=428ms TTL=63

Reply from 192.168.123.250: bytes=32 time=395ms TTL=63

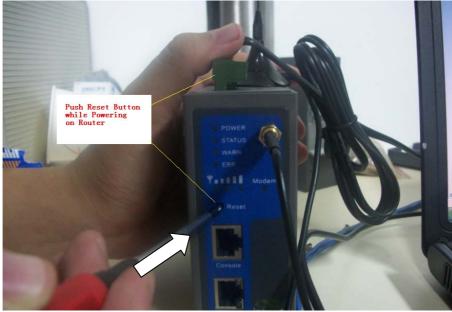
Reply from 192.168.123.250: bytes=32 time=397ms TTL=63

Reply from 192.168.123.250: bytes=32 time=393ms TTL=63
```

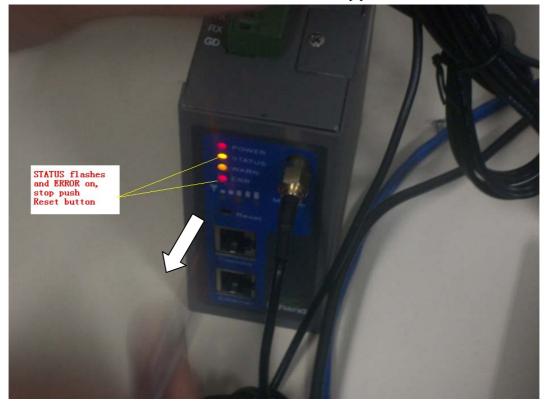
2.5 Reset to Factory Defaults

2.5.1 Hardware Method

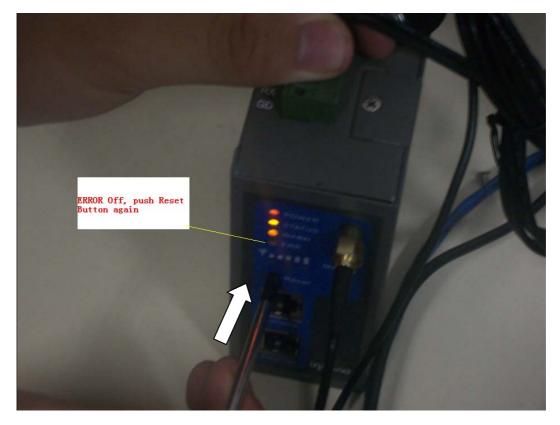
1) Push "Reset" while powering on InRouter700:



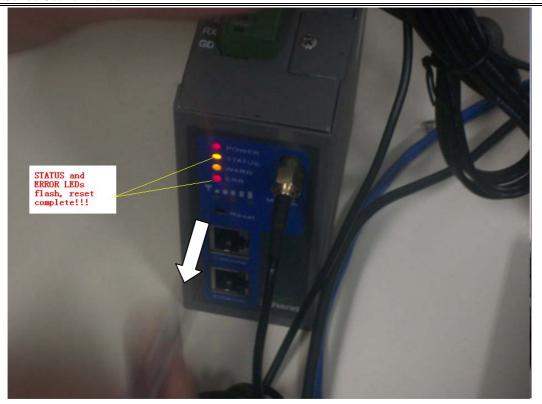
2) When you see STATUS LED flashes and then ERROR LED turns on, stop push RESET button:



3) After a few seconds, the ERROR LED then turns off:



4) At this time, please push RESET button until both the STATUS LED and ERROR LED flash, which means reset successful:



IP: 192.168.2.1

Net Mask: 255.255.255.0 Serial parameter: 19200-8-N-1

2.5.2 Web Method

1) Login the web interface of IR700, select "System"→"Config Management":



2) Click "Restore default configuration" to Reset IR700:



III

Advanced Configuration

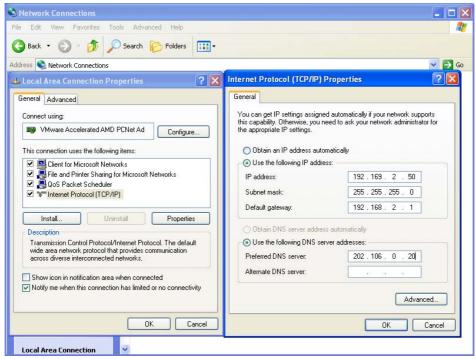
- ◆ Configuration on Web
- ◆ Configuration via CLI

3.1 Configuration on Web

InRouter must be correctly configured before use. This Chapter will show you how to configure via Web.

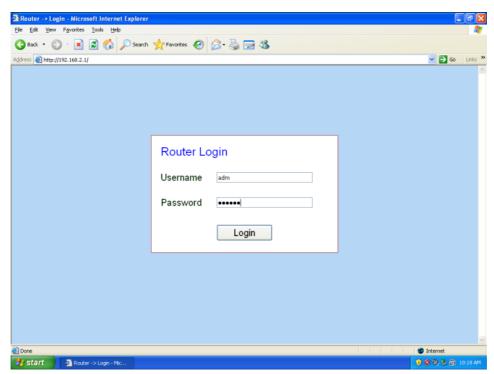
3.1.1 Preparation

Firstly, connect your devices with IR700 by cable or HUB (switch), then set the IP of PC and IR700 in the same subnet, for example: Set PC IP to 192.168.2.50, net mask: 255.255.255.0, gateway (default IP of IR700: 192.168.2.1):

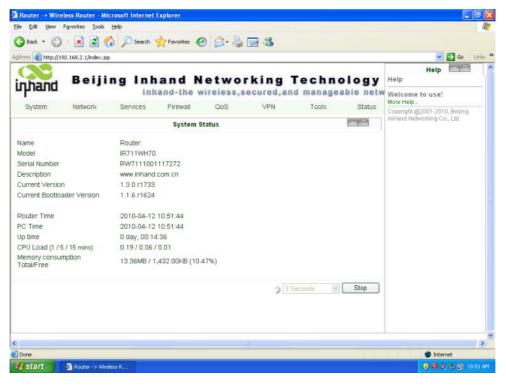


Open IE browser, input the IP address of IR700: http://192.168.2.1 (default IP of InRouter700).

Then you'll see the Login Web below, you need to login as Administrator. Input the username and password (default: adm/123456).



Click "Login" to enter configure web:



3.1.2 System

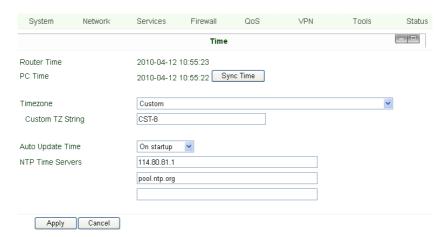
System settings include the 9 settings: Basic Setup, Time, Serial Port, Admin Access, System Log, Config Management, Update, Reboot and Logout.

(1) Basic Setup



Basic Setup					
Description: Language and char	Description: Language and characteristic settings of configuration web.				
Parameters Name Description Default Example					
Language	Choose language of configuration web	Chinese	English		
Router Name	Set name of InRouter	Router	My InRouter		
Host Name	Name the device/PC linked with IR700	Router	My InRouter		

(2) Time



System Time Setting					
Description: set local time zone and NT	Description: set local time zone and NTP update time.				
Name	Description	Default			
Router Time	Display router time	1970-1-1 8:00:00			
PC Time	Display PC time (or the time of device linked with				
	router)				
Time Zone	Set time zone	Custom			
Custom TZ string	Set the string of time zone of Router	CST-8			
Auto Update Time	Time Update Interval	Disabled			
NTP Time Servers (after enable the	Setting for NTP Time server. (Three at the most)	pool.ntp.org			
Auto Update Time)					

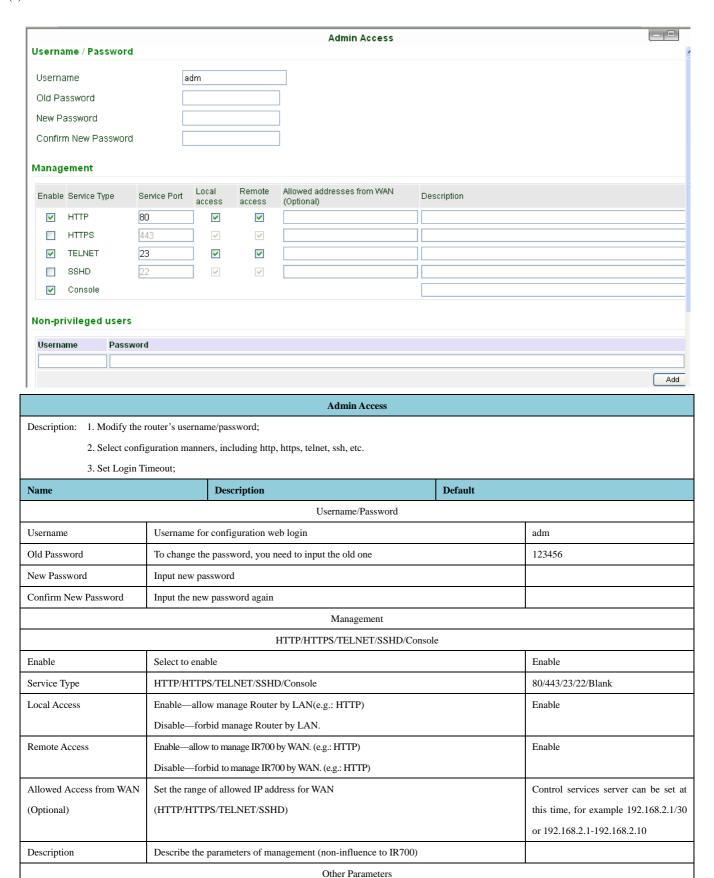
(3) Serial Port



Serial Port					
Description: Set related parameters acco	Description: Set related parameters according to application				
Name	Description	Default			
Baud Rate	Serial baud rate	19200			
Data Bit	Serial data bits	8			
Parity	Set parity bit of serial data.	None			
Stop Bit	Set stop bit of serial data.	1			
Hardware Flow Control	Enable Hardware Flow Control	Disable			
Software Flow Control	Enable Software Flow Control	Disable			

(4) Admin Access

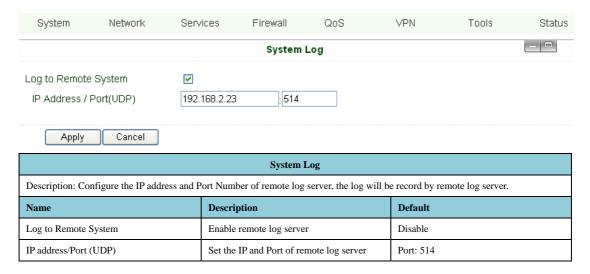
Log Timeout



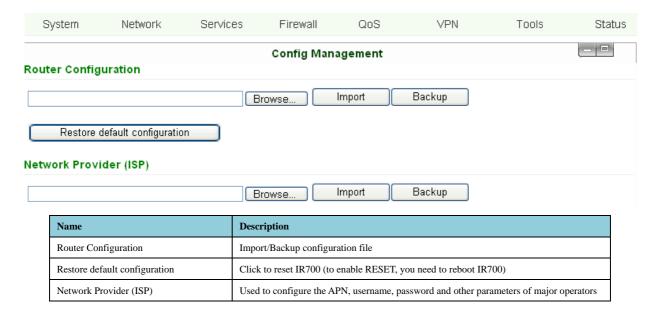
500 seconds

Set the Log Timeout, configuration web will be disconnected after timeout

(5) System Log



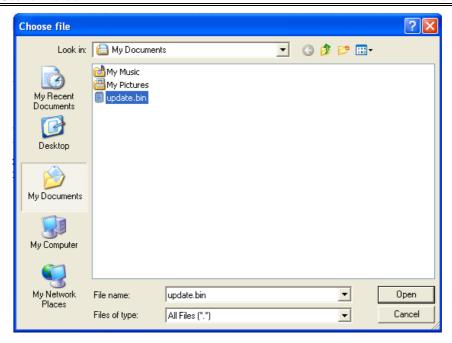
(6) Config Management



(7) System Upgrade



If need to upgrade system, click "System"=>"System upgrade" to enter update page, then follow the steps below: Click "Browse", choose the upgrade file;



Click "update", and then click "sure" to begin update as it shows below.

0:01

Upgrading system... It will take about 1-5 minutes depending on network. Please wait and don't interrupt!

Upgrade firmware succeed, and click "reboot" to restart IR700.

(8) Reboot

If you need to reboot system, please click "System"=>"Reboot", Then click "OK" to restart system.



(9) Logout

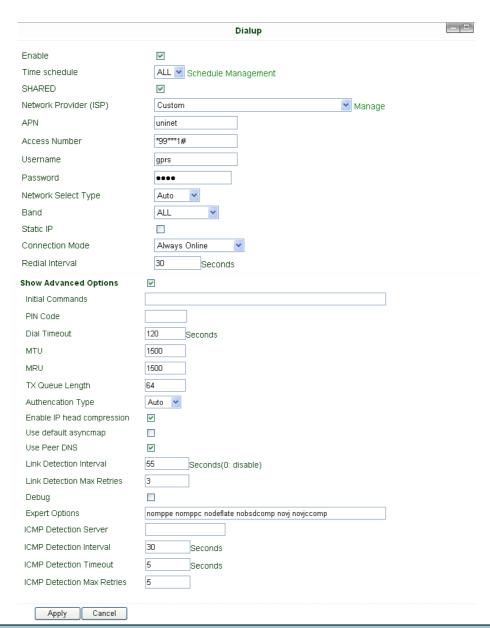
If you need to logout system, click "System"=>"Logout", and then click "OK".



3.1.3 Network

Network settings include configurations of Dialup, LAN, DNS, DDNS, Static Route, and etc.

(1) Dialup



Dialup				
Description: configure PPP dial-up parameters.				
Name	Description	Default		
Enable	Enable PPP dialup	Enable		
Time Schedule	Set time for online and offline	ALL		
SHARED	Enabled—device linked with Router Can access to internet.	Enable		
	Disable—device Can NOT access to internet via Router.			
ISP	Select local ISP, if not listed here, please select "Customer"	Customer		
Network Select Type	Choose mobile network type	HSDPA (or GPRS)		
APN	APN parameters provided by Local ISP	cmnet/uninet		
Access Number	Dialup parameters provided by Local ISP	"*99#""*99***1#" or #777		

Initiouster 700 Series Coer 5	1/14/14/14	** ** ********************************
Username	Dialup parameters provided by Local ISP	"gprs" or "CDMA"
Password	Dialup parameters provided by Local ISP	"gprs" or "CDMA"
Static IP	Enable Static IP if your SIM card can get static IP address	Disable
Connection Mode	Optional Always Online,	Always Online
Redial Interval	When Dial fails, InRouter will redial after the interval	30 seconds
Show Advanced Options	Enable configure advanced options	Disabled
Initial Commands	Used for advanced parameters	Blank
Dial Timeout	Set dial timeout (IR700 will reboot after timeout)	120 seconds
MTU	Set max transmit unit	1500
MRU	Set max receive unit	1500
TX Queue Length	Set length of transmit queue	3
Enable IP header compression	Enable IP header compression	Disabled
Use default asyncmap	Enable default asyncmap, PPP advanced option	Disabled
Using Peer DNS	Click Enable to accept the peer DNS	Enabled
Link Detection Interval	Set Link Detection Interval	30 seconds
Link Detection Max Retries	Set the max retries if link detection failed	3
Debug	Enable debug mode	Enable
Expert Option	Provide extra PPP parameters, normally user needn't set this.	Blank
ICMP Detection Server	Set ICMP Detection Server, blank represents none	Blank
ICMP Detection Interval	Set ICMP Detection Interval	30 seconds
ICMP Detection Timeout	Set ICMP Detection Timeout (IR700 will reboot if ICMP time out)	5 seconds
ICMP Detection Max Retries	Set the max number of retries if ICMP failed	5

Dialup----Time Schedule Management:



Name	Description	Default
Name	Name the schedule	schedule 1
Sunday		Blank
Monday		Enable
Tuesday		Enable
Wednesday		Enable
Thursday		Enable
Friday		Enable
Saturday		Blank
Time Range 1	Set Time Range 1	9:00-12:00
Time Range 2	Set Time Range 2	14:00-18:00
Time Range 3	Set Time Range 3	0:00-0:00
Description	Describe configuration	Blank

(2) WAN (for InRouter704/714/794 only)

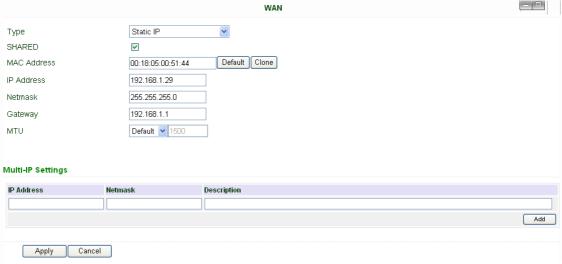


This page is to set the type of WAN port:

WAN		
Name	Description	Default
Туре	Static IP;	Disabled
	Dynamic Address(DHCP);	
	ADSL Dialup(PPPoE);	
	Disabled	

Attention: There can only be one WAN type at one time, enabling one type WAN will disabled another.

WAN—Static IP



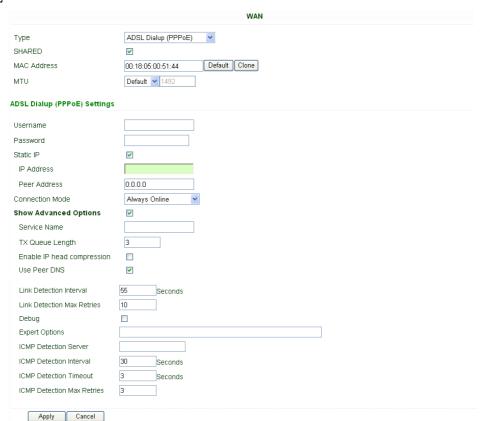
Name	Description	Default
Туре	Static IP	
SHARED	Enabled—the local device linked with Router can get access to	Enable
	internet.	
	Disable—the local device can't get access to internet via Router.	
MAC Address	Set MAC Address	
IP Address	Set WAN port IP	192.168.1.29
Net Mask	Set WAN port Net Mask	255.255.255.0
Gateway	Set WAN Gateway	192.168.1.1
MTU	Set Max Transmission Unit, optional between default and manual	1500
Multi-IP Settings(can set 8 additional IP address at the most)		
IP address	Set the additional IP address of LAN	Blank
Net Mask	Set Net Mask	Blank
Description	Describe the settings	Blank

WAN—Dynamic Address (DHCP)



Name	Description	Default
Туре	Dynamic Address (DHCP)	
SHARED	Enabled—the local device linked with Router can get access to	Enable
	internet.	
	Disable—the local device can't get access to internet via Router.	
MAC Address	Set MAC Address	_
MTU	Set Max transmission unit, optional between default and manual	1500

WAN --ADSL



Name	Description	Default
Туре	ADSL Dialup (PPPoE)	
SHARED	Enabled—the local device linked with Router can get access to internet.	Enable
	Disable—the local device can't get access to internet via Router.	
MAC Address	Set MAC Address	
MTU	Set Max Transmission Unit, optional between default and manual	1500
ADSL Dialup (PPPoE) Settings		
Username	Set username for dialing up	Blank

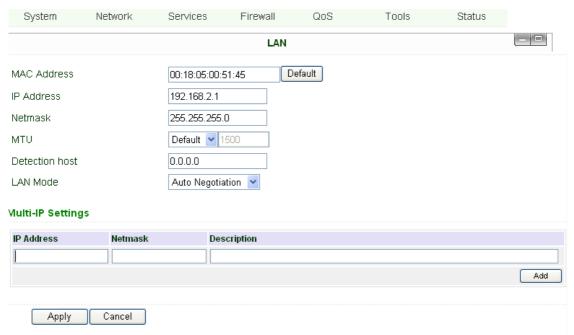
Password	Set password for dialing up	Blank
Static IP	Enable Static IP	Disabled
IP address	Static IP Address	Blank
Peer IP	Set Peer IP	Blank
Connection Mode	Set connection mode (Connect on Demand/Always Online/ Manual)	Always Online
Advanced Options		
Show advanced options	Enable advanced configuration	Disabled
Service Name	Name the service	Blank
TX Queue Length	Set TX Queue Length	3
Enable IP head compression	Click to enable IP head compression	Disabled
User Peer DNS	Enable User Peer DNS	Disabled
Link Detection Interval	Set link detection interval	55 seconds
Link Detection Max Retries	Set link detection max retries	10 (times)
Debug	Select to enable debug-mode	Disabled
Expert Options	Set expert parameters	Blank
ICMP Detection Server	Set ICMP Detection Server	Blank
ICMP Detection Time	Set ICMP Detection Time	30
ICMP Detection Timeout	Set ICMP Detection Timeout	3
ICMP Detection Max Reties	Set ICMP Detection Max Reties	3

(3) Link Backup (for IR704/714/794 only)



Link Backup, to realize link backup between Cellular WAN and Ethernet WAN, when one fails, IR700 will try the other		
Name	Description	Default
Enable	Enable Link Backup service	Disabled
Main Link	InRouter will choose this for normal WAN connection	WAN (Ethernet WAN)
ICMP Detection Server	ICMP can ensure a link to certain destination	
ICMP Detection Interval	Time interval between ICMP packages	10
ICMP Detection Timeout	Timeout for each ICMP package	3 (seconds)
ICMP Detection Max Retries	After the retries if no ICMP succeed, dialup will try the backup link	3
Backup Link	Select the backup link	WAN

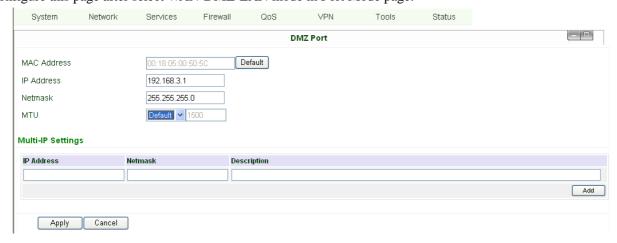
(4) LAN



Name	Description	Default
MAC Address	The MAC address in LAN	00:10:A1:86:95:02 (Provided by InHand), for manufactures
IP Address	Set IP Address in LAN	192.168.2.1 (If Changed, you need to input the new address for
		entering the configuration web)
Net Mask	Set Net Mask of LAN	255.255.255.0
MTU	Set MTU length, optional between Default and Manual	1500
Detection Host	Set Detection Host Address	0.0.0.0
LAN Mode	Set LAN Mode: 100M full-duplex, 100M half-duplex,	Auto Negotiation
	10M full-duplex, 10M half-duplex	
Multi-IP Settings (Support additional 8 IP addresses at the most)		1 8 IP addresses at the most)
IP Address	Set additional IP Address of LAN	Blank
Description	Description about this IP address	Blank

(5) DMZ Port (for InRouter704/714/794 only)

Configure this page after select WAN-DMZ-LAN mode in Port Mode page.



Name	Description	Default
MAC Address	Set MAC address of DMZ port	(Provided by
		Manufacture:
		InHand)
IP Address	Set IP Address of DMZ port	192.168.3.1
Net Mask	Set Net Mask of DMZ port	255.255.255.0
MTU	Optional between Default & Manual	Default (1500)
Multi-IP Settings (8 additional IP address at the most)		
IP Address	Set additional IP address for DMZ port	Blank
Net Mask	Set Net Mask	Blank
Description	Description of additional IP address	Blank

(6) Port Mode (for InRouter704/714/794 only)



Name	Descriptions	Default
Port Mode	LAN (four LAN ports)	WAN-DMZ-LAN
	WAN-LAN (3 LAN ports and 1 WAN port)	
	WAN-DMZ-LAN (1 WAN port, 1 DMZ port and 2 LAN ports)	

(7) **DNS**

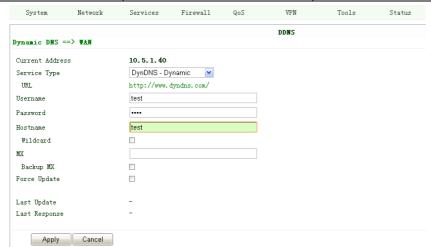


DNS			
Description: Set DNS manually, if this configuration is blank, then Router will use DNS distributed by dialing up. Normally, there's			
no need to set this parameter unless when you need use static IP address for WAN Port.			
Name	Description	Default	
Primary DNS	Set Primary DNS	Blank	
Secondary DNS	Set Secondary DNS	Blank	

(8) DDNS (Dynamic DNS)



Name	Description	Default
Current Address	Show the current IP address	Blank
Service Type	Select DDNS Provider	Disabled



Name	Description	Default
Service Type	DynDNS - Dynamic	
URL	http://www.dyndns.com/	
Username	Registered username for DDNS	
Password	Registered password for DDNS	
Hostname	Registered hostname for DDNS	

(9) Static Route

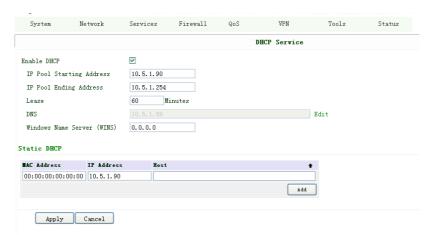


Static Route			
Description: Add/Remove addition	Description: Add/Remove additional static routes. Users generally do not need to set this		
Name	Description	Default	
Destination	Set IP address of destination	Blank	
Net Mask	Set subnet Mask of destination	255.255.255.0	
Gateway	Set the gateway of destination	Blank	
Interface	Optional LAN/WAN port access to destination	Blank	
Description	Describe static route	Blank	

3.1.4 Service

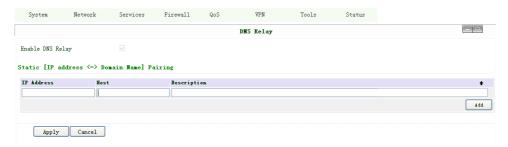
Service settings include DHCP Service, DNS Forwarding, VRRP and other related parameters.

(1) DHCP Service



Name	Description	Default
Enable DHCP	Click to enable DHCP	Enable
IP Pool Starting Address	Set the starting IP address of DHCP pool	192.168.2.2
IP Pool Ending Address	Set the ending IP address of DHCP pool	192.168.2.100
Lease	Set the valid time lease of IP address	60 minutes
	obtained by DHCP	
DNS	Set DNS Server	192.168.2.1
Windows Name Server	Set WINS	Blank
(WINS)		
Static DHCP (can set 20 designated IP address at the most)		
MAC Address	Set the MAC address of a designated IP	Blank
	address	
IP address	Set the static IP address	192.168.2.2
Host	Set the hostname	Blank

(2) DNS Relay



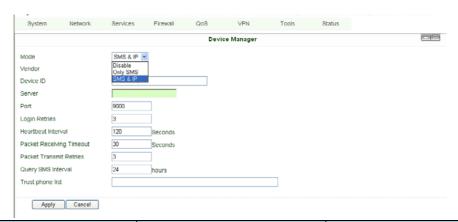
Name	Description	Default
Enable DNS Relay	Click to enable DNS Relay	Enable (after enable DHCP)
Designate IP address<=>DNS couples (20 at the most)		
IP Address	Set IP address <=> DNS couples	Blank
Host	Set the name of IP address <=> DNS couples	Blank
Description	Describe IP address <=> DNS couples	Blank

(3) VRRP



Name	Description	Default
Enable	Select to enable VRRP	Disable
Group ID	Select group id of routers (range 1-255)	1
Priority	Select priority for router (range 1—254)	10 (bigger number stands for higher priority)
Advertisement Interval	Set ad interval	60 sec
Virtual IP	Set Virtual IP	Blank
Authentication Type	Optional: None/Password type	None

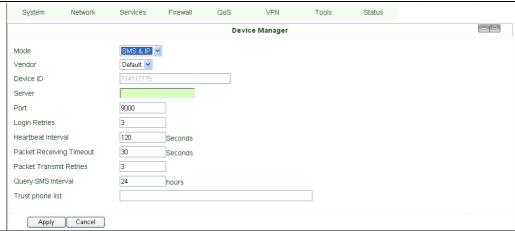
(4) Device Manager



Name	Description	Default
Mode	Disabled/Only SMS/SMS+IP	Disable

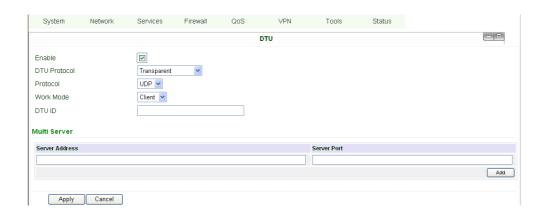


Name	Description	Default
Mode	Only SMS	
Query SMS Interval	Set how long to check SMS	24 hours
Trust Phone List	Add trust Cell Phone List	



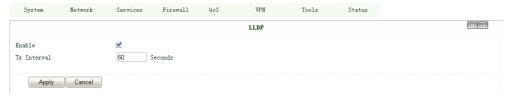
Name	Description	Default
Mode	SMS+IP Mode	
Vendor	Set Vendor Name	Default
Device ID	Set Device ID	
Server	Set Device Manager Server IP	
Port	Set Port For DM	9000
Login Retries	Set login retries	3
Heartbeat Interval	Set interval of heartbeat	120
Packet Receiving Timeout	Set packet receiving timeout	30
Packet Transmit Retries	Set packet transmit reties	3
Query SMS Interval	Set how long to check SMS	24
Trust phone list	Set trust cell phone list	

(5) **DTU**



DTU (Data Transmit Unit)		
Description: Set general DTU capabilities		
Name	Description	Default
Enable	Click to enable DTU	Disable
DTU Protocol	Set DTU protocol	Transparent
Protocol	Optional between TCP/UDP	UDP
Work Mode	Set DTU as client or server	Client
DTU ID	Set ID of DTU	Blank
Multi Server	Set the IP address and Port of server to receive data.	Blank

(6) LLDP (Link Layer Discovery Protocol)

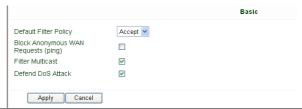


Name	Description	Default
Enable	Click to enable LLDP	Disable
Tx Interval	Set DTU protocol	Transparent

3.1.5 Firewall

This page is to set parameters concerned with firewall.

(1) Basic Configuration



Name	Description	Default
Default Filter Policy	Optional between Accept /Refused	Accept
Block Anonymous WAN Request (ping)	Click to enable filer ping request	Disable
Filter Multicast	Click to enable filter multicast	Enable
Defend DoS Attack	Click to enable Defend DoS Attack	Enable

(2) Filtering



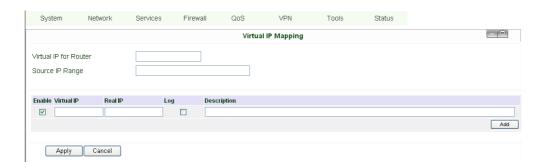
Filtering (50 settings at the most)		
Description: Control TCP/IP package via sou	Description: Control TCP/IP package via source/destination IP/Port, provide a safe internal network environment.	
Name	Description	Default
Enable	Click to enable filtering	Blank
Protocol	Optional among TCP/UDP/ICMP	All
Source IP address	Set Source IP address	Blank
Source Port	Set Source Port	Blank
Destination IP	Set destination IP	Blank
Destination Port	Set destination port	Blank
Action	Accept/Deny	Accept
Log	Click to enable login	Disable
Description	Describe your configuration	Blank

(3) Port Mapping



Port Mapping (50 at the most)		
Description: Set port mapping to enable exter	Description: Set port mapping to enable external PC to get access to internal services via certain port.	
Name	Description	Default
Enable	Click Enable Port Mapping	Disable
Source	To fill with source IP	0.0.0.0/0
Service Port	Fill the port of service	8080
Internal Address	Set the internal IP for mapping	Blank
Internal Port	Set the Port mapping to internal	8080
Log	Click to enable log about port mapping.	Disable
Description	Describe meanings of each mapping	Blank

(4) Virtual IP Mapping



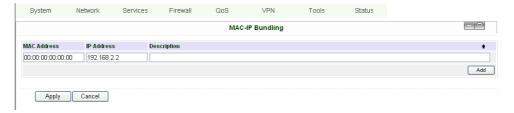
	Virtual IP mapping (50 at the most)	
Description: An internal PC's IP can match to	Description: An internal PC's IP can match to a virtual IP, and external network can access to internal PC via this virtual IP address.	
Name	Description	Default
Virtual IP for Router	Set Virtual IP for Router	Blank
Source IP Range	Set range of source IP address	Blank
Virtual IP	Set virtual IP	Blank
Real IP	Set real IP	Blank
Log	Enable logging concerned with virtual IP	Disable
Description	Describe this configuration	Blank

(5) **DMZ**



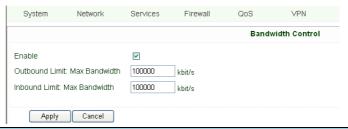
DMZ		
Description: Provide DMZ function, which enhance safety of internal network		
Name	Description	Default
Enable DMZ	Click to Enable DMZ	Disable
DMZ Host	Set host IP of DMZ	Blank
Source Address Range	Set IP address with restrict IP access	Blank

(6) MAC-IP Bundling



	MAC-IP Address Bundling (20 at the most)	
Description: when firewall denies all access to the external network, only PC with MAC-IP Bundling can access to external network		
Name	Description	Default
MAC Address	Set Bundling Mac address	Blank
IP Address	Set Bundling IP address	192.168.2.2
Description	Describe this configuration	Blank

3.1.6 QoS



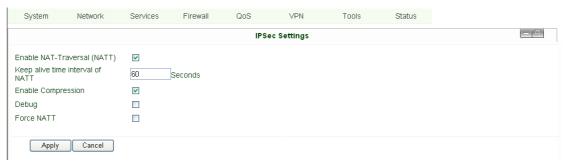
	Bandwidth Control	
Description: control the speed of access to int	Description: control the speed of access to internet	
Name	Description	Default
Enable	Click to enable	Disable
Outbound Limit Max	Set the limit speed of out- bound	100000kbit/s
Bandwidth	bandwidth	
Inbound Limit Max	Set the limit speed of inbound bandwidth	100000kbit/s
Bandwidth		

3.1.7 VPN

This page introduces the parameters set in InRouter 700's Web.

(1) IPSec Settings (For IR711/791/714/794 only)

To build an IPSec VPN Tunnel, you need first set IPSec properties in this page, then turn to IPSec Tunnels to add your VPN:



	IPSec Settings	
Description: 1. Select to Enable or Disable	NATT, normally we need to enable, unless you	ou ensure there is no NAT routers in the
network.		
2. Select to enable Compression	on Mode or Debug	
Name	Description	Default
Enable NAT Transversal	Click to enable NATT	Enable
(NATT)		
Keep alive time interval of NATT	Set live time for NATT	60 sec
Enable Compression	Click to enable	Enable
Enable Debug	Click to enable	Disable
Force NATT	Click to enable	Disable

(2) IPSec Tunnels (For IR711/791/714/794 only)



Click "Add" and enter the configuration web:

IKE Lifetime Local ID Type	IPSec_tunnel_1 0.0.0.0
Tunnel Name Destination Address Startup Modes Restart WAN when failed Negotiation Mode IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	IPSec_tunnel_1
Tunnel Name Destination Address Startup Modes Restart WAN when failed Negotiation Mode IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	
Destination Address Startup Modes Restart WAN when failed Negotiation Mode IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	
Startup Modes Restart WAN when failed Negotiation Mode IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	0.0.0.0
Restart WAN when failed Negotiation Mode IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	
Negotiation Mode IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	Auto Activated 🔻
IPSec Protocol IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	▼
IPSec Mode Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	Main Mode
Tunnel Type Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	ESP V
Local Subnet Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	Tunnel Mode
Local Netmask Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	Subnet - Subnet 💌
Remote Subnet Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	192.168.2.1
Remote Netmask Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	255.255.255.0
Phase 1 Parameters IKE Policy IKE Lifetime Local ID Type	0.0.0.0
IKE Policy IKE Lifetime Local ID Type	255.255.255.0
IKE Lifetime [
Local ID Type	3DES-MD5-DH2 v
	86400 Seconds
	IP Address 💌
Remote ID Type	IP Address 🔻
Authentication Type	Shared Key 💌
Key	
hase 2 Parameters	
IPSec Policy	3DES-MD5-96
IPSec Lifetime	3600 Seconds
Perfect Forward Serecy(PFS)	None 💌
ink Detection Parameters	
	60 Seconds(0: disable)
DPD Timeout	180 Seconds
ICMP Detection Server	
ICMP Detection Local IP	
ICMP Detection Interval	60 Seconds
ICMP Detection Timeout	5 Seconds
ICMP Detection Max Retries	10
Save Cancel	

IPSec Tunnels			
Description: configure IPSec Tunnels	Description: configure IPSec Tunnels		
Name	Description	Default	
Show Advanced Options	Click to enable advanced options	Disable	
	Basic Parameters		
Tunnel Name	To name the tunnel	IPSec_tunnel_1	
Destination Address	Set the destination address of IPSec VPN Server	Blank	
Startup Mode	Auto Activate/Trigged by Data/Passive/Manually Activated	Enable	
Negotiation Mode	Optional: Main Mode or	Main Mode	
	Aggressive Mode		

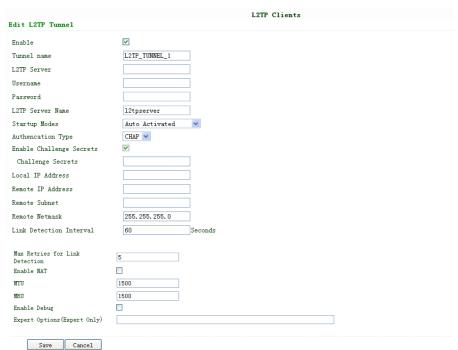
buter 700 Series User's Manuar		www.iiiiaiidiletworks.com
IPSec Mode	Optional: ESP or AH	ESP
(Enable Advanced options)		
IPSec Mode	Optional: Tunnel Mode or Transport Mode	Tunnel Mode
(Enable Advanced options)		
Tunnel Type	Optional:	Subnet——Subnet Mode
	Host—Host, Host—Subnet, Subnet—Host,	
	Subnet——Subnet	
Local Subnet	Set IPSec Local Protected Subnet	192.168.2.1
Local Subnet Net Mask	Set IPSec Local Protected Subnet Net Mask	255.255.255.0
Remote Subnet Address	Set IPSec Remote Protected Subnet	Blank
Remote Subnet Net Mask	Set IPSec Remote Protected Subnet Net Mask	255.255.255.0
	Phase 1 Parameters	
IKE Policy	Optional: 3DES-MD5-96 or AES-MD5-96	3DES-MD5-96
IKE Lifetime	Set IKE 的 Lifetime	86400 sec
Local ID Type	Optional: FQDN, USERFQDN, or IP Address	IP Address
Local ID (Only for FQDN 和 USERFQDN)	Set the ID according to ID type	Blank
Remote ID Type	Optional: FQDN,	IP Address
	USERFQDN, or IP Address	
Remote ID (Only for FQDN and USERFQDN)	Set the ID according to ID type	Blank
Authentication Type	Optional: Shared Key or Certificate	Shared Key
Key (While choosing Shared Key Authentication	Set IPSec VPN Negotiation Key	Blank
Type)		
	Phase 2 Parameters	
IPSec Policy	Optional: 3DES-MD5-96 or AES-MD5-96	3DES-MD5-96
IPSec Lifetime	Set IPSec Lifetime	3600sec
Perfect Forward Secrecy (PFS)	Optional: Disable, GROUP1, GROUP2, GROUP5	Disable ((Enable Advanced options)
Link Detection Parameters (Enable Advanced options)		
DPD Time Interval	Set DPD Time Interval	60sec
DPD Timeout	Set DPD Timeout	180sec
ICMP Detection Server	Set ICMP Detection Server	Blank
ICMP Detection Local IP	Set ICMP Detection Local IP	
ICMP Detection Interval	Set ICMP Detection Interval	30sec
ICMP Detection Timeout	Set ICMP Detection Interval	5sec
ICMP Detection Max Retries	Set ICMP Detection Max Retries	3
<u></u>	•	

(3) GRE Tunnels (For IR711/791/714/794 only)



GRE Tunnels		
Name	Description	Default
Enable	Click Enable	Enable
Tunnel Name	Set GRE Tunnel Name	tun0
Local Virtual IP	Set Local Virtual IP	0.0.0.0
Remote Address	Set Remote Address	0.0.0.0
Remote Virtual IP	Set Remote Virtual IP	0.0.0.0
Remote Subnet Address	Set Remote Subnet Address	0.0.0.0
Remote Subnet Net Mask	Set Remote Subnet Net Mask	255.255.255.0
Key	Set Tunnel Key	Blank
NAT	Click Enable NAT Function	Disable
Description	Add Description	Blank

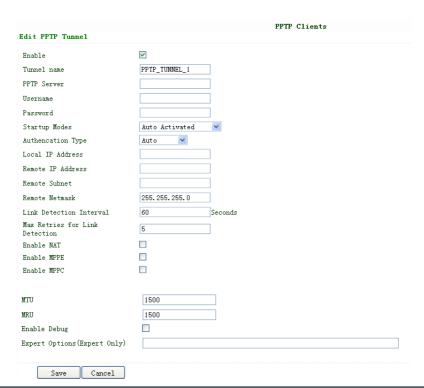
(4) L2TP Clients (For IR711/791/714/794 only)



L2TP Clients		
Description: set parameters related to L2TP Clients		
Name	Description	Default
Enable	Click Enable	Enable
Tunnel Name	Set Tunnel Name	L2TP_TUNNEL_1
L2TP Server	SetL2TP Server Address	Blank
Username	Set Server Username	Blank
Password	Set Server Password	Blank
Server Name	Set Server Name	12tpserver
Startup Modes	Set Startup Modes: Auto Activated, Trigged by Data, Manually Activated	Auto Activated
Authencation Type	Set Authencation Type: CHAP, PAP	СНАР
Enable Challenge secrets	Set to enable Challenge secrets	Disable
Local IP Address	Set Local IP Address	Blank

Remote IP Address	Set Remote IP Address	Blank
Remote Subnet	Set Remote Subnet	Blank
Remote Subnet Net Mask	Set Remote Subnet Net Mask	255.255.255.0
Link Detection Interval	Set Link Detection Interval	60
Max Retries for Link Detection	Set Max Retries for Link Detection	5
Enable NAT	Click Enable NAT	Disable
MTU	Set MTU parameters	1500
MRU	Set MRU parameters	1500
Enable Debug Mode	Click Enable Debug Mode	Disable
Expert Options	Set Expert Options	Blank

(5) PPTP Clients (For IR711/791/714/794 only)



PPTP Clients parameters		
Description: Set PPTP Clients parameters		
Name	Description	Default
Enable	Click Enable	Enable
Tunnel Name	Set Tunnel Name	PPTP_TUNNEL_1
PPTP Server	Set PPTP Server Address	Blank
Username	Set Server Username	Blank
Password	Set Server's Password	Blank
Startup Mode:	Set Startup Modes: Auto Activated,	Auto Activated
	Trigged by Data, Manually Activated	
Authencation Type	Set Authencation Type: CHAP, PAP,	Auto
	MS-CHAPv1, MS-CHAPv2	
Local IP Address	Set Local IP Address	Blank
Remote IP Address	Set Remote IP Address	Blank
Remote Subnet	Set Remote Subnet	Blank

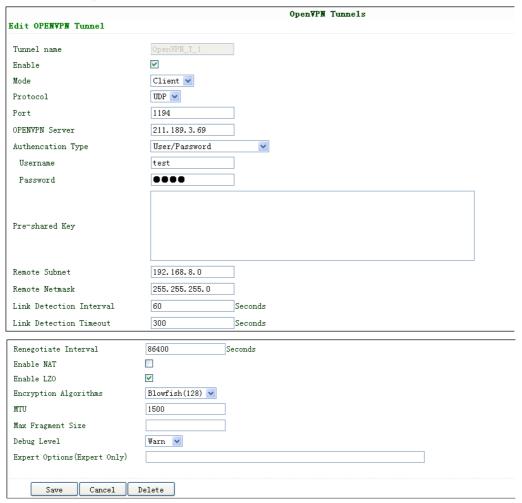
Remote Subnet Net Mask	Set Remote Subnet Net Mask	255.255.255.0
Link Detection Interval	Set Link Detection Interval	60
Max Retries for Link Detection	Set Max Retries for Link Detection	5
Enable NAT	Click Enable NAT	Blank
Enable MPPE	Click Enable MPPE	Blank
Enable MPPC	Click Enable MPPC	Blank
MTU	Set MTU parameters	1500
MRU	Set MRU parameters	1500
Enable Debug Mode	Click Enable Debug Mode	Blank
Expert Options	For InHand R&D only	Blank

(6) Open VPN Tunnels (for IR791/794 only)

In the configuration WEB of 700, select "VPN"=> "Open VPN Tunnels" as below:



Click "Add" to add a new Open VPN tunnel:



Name	Description
Tunnel name	Can't be set
Enable	Enable this configuration
Mode	Client or Server
Protocol	UDP or TCP
Port	Import or Export Certificate (CRL)
OPEN VPN Server	OPEN VPN Server's IP or DNS
Authencation Type	(1) None for host to host connection (not available when 700 as server)
	(2) Pre-shared Key for host to host connection (not available when 700 as server)
	(3) User/Password For multi users to access
	(4) X.509 Cert (multi-client) CA mode for multi users to access
	(5) X.509 CertCA mode for host to host tunnel
Pre-shared Key	Set shared key or TLS-AUTH static password
Remote Subnet, Remote Net mask	Set the static route of the router, always towards the subnet of its peer
Link Detection Interval, Link Detection Timeout	Always use default
Renegotiate Interval	Always use default
Enable NAT	Set NAT mode, meanwhile it will disable route mode
Enable MPPE	Enable MPPE, always set in server
Enable LZO	Enable LZO compression
Encryption Algorithms	Set encryption algorithms, must match with the server
MTU, Max Fragment Size	Always use default

(7) Open VPN Advanced (for IR791/794 only)

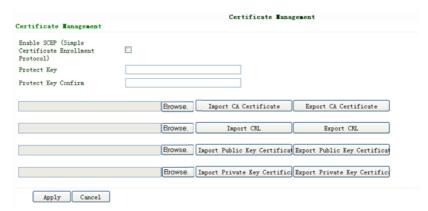
This configuration page is only used for the Open VPN Server.



Open VPN Advanced		
Description: configure the features of Open VPN, using InRouter791/794 as Server		
Name	Description	
Enable Client-to-Client	Enable client access to other clients	
Client Management		
Tunnel Name	Tunnel Name of the Client	
Username/Common Name	Username (using Username/password mode) or Common Name in CA (CA mode)	
Local Static Route	The client subnet	
Remote Static Route	The server subnet	

Attention: CA can only be produced by customer's PC; InRouter 700 CAN NOT produce CA.

(8) Certificate Management (for IR791/794 only)



Certificate Management		
Description: set parameters concerned with CA:		
Name	Description	Default
Enable SCEP	Click Enable	
(Simple Certificate Enrollment Protocol)		
Certificate Protected Key	Set Certificate Protected Key	Blank
Certificate Protected Key Confirm	Confirm Certificate Protected Key	Blank
Import/Export CA Certificate	Import or Export (CA) Certificate	Blank
Import/Export Certificate (CRL)	Import or Export Certificate (CRL)	Blank
Import/Export Public Key Certificate	Import or Export Public Key Certificate	Blank
Import/Export Private Key Certificate	Import or Export Private Certificate	Blank

3.1.8 Tools

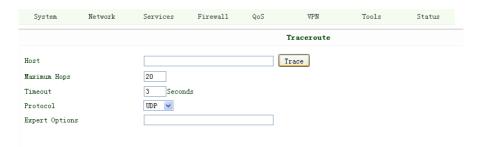
Tools contain PING Detection, Route Trace, Link Speed Test and etc.

(1) PING



PING			
Description: introduce the tool PING for detecting link			
Name Description Default			
Host	Destination for PING	Blank	
Ping Count	Set PING Counts	4 times	
Packet Size	Set PING Packet Size	32 Bytes	
Expert Options	Advanced parameters	Blank	

(2) Trace Route



Trace Route		
Function: Detect link failure		
Name Description Default		
Host	Destination for Trace Route	Blank
Max Hops	Set Max Hops	20
Time Out	Set Time Out	3 sec
Protocol	Optional: ICMP/UDP	UDP
Expert Options	Advanced parameters	Blank

(3) Link Speed Test

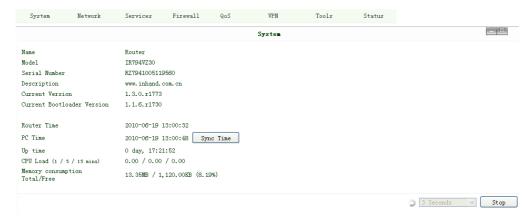


Link Speed Test				
Function: test link speed via unload or download				

3.1.9 Status

Status contains System, Modem, Network Connections, Route Table, Device List and Log.

(1) System Status



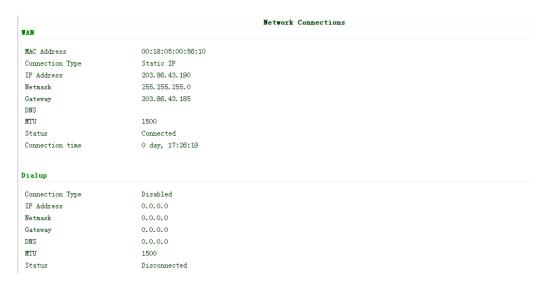
This page shows the status of system, including Name, Model Type, Current Version and etc.

(2) Modem Status



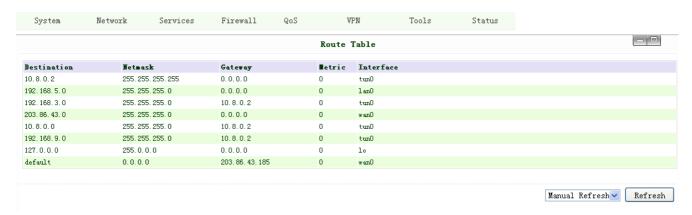
This page shows the status of Modem, including the signal level.

(3) Network Connections



This page shows the network connections via WAN or LAN

(4) Route Table



This page shows the route table of IR700.

(5) Device List



This page shows the devices linked with IR700.

(6) Log

			Log	
Level	Time	∎odule	Content	
			Too many logs, old logs are not displayed. Please download log file to check more logs!	
debug	Jun 19 13:06:49	InAgent	IMSI:0123456789ABCDE	
info	Jun 19 13:06:49	InAgent	Firmware Version(1.3.0.r1773);Entity Config Timestamp(a-1275632533021);Sysconfig Timestamp(000000000000000000000000000000000000	
info	Jun 19 13:06:59	InAgent	Try to login(9th/10)	
info	Jun 19 13:06:59	InAgent	nvram sysconf_timestamp not found!	
debug	Jun 19 13:06:59	InAgent	IMSI:0123456789ABCDE	
info	Jun 19 13:06:59	InAgent	Firmware Version(1.3.0.r1773);Entity Config Timestamp(a=1275632533021);Sysconfig Timestamp(000000000000000000	
info	Jun 19 13:07:09	InAgent	Try to login(10th/10)	
info	Jun 19 13:07:09	InAgent	nvram sysconf_timestamp not found!	
debug	Jun 19 13:07:09	InAgent	IMSI:0123456789ABCDE	
info	Jun 19 13:07:09	InAgent	Firmware Version(1.3.0.r1773);Entity Config Timestamp(a-1275632533021);Sysconfig Timestamp(0000000000000000)	
info	Jun 19 13:07:19	InAgent	Try to connect OVDP AP(10.8.0.6:9000)	
info	Jun 19 13:07:19	InAgent	Try to login(1th/10)	
info	Jun 19 13:07:19	InAgent	nvram sysconf_timestamp not found!	
debug	Jun 19 13:07:19	InAgent	IMSI:0123456789ABCDE	
info	Jun 19 13:07:19	InAgent	Firmware Version(1.3.0.r1773);Entity Config Timestamp(a-1275632533021);Sysconfig Timestamp(0000000000000000)	
info	Jun 19 13:07:29	InAgent	Try to login(2th/10)	
info	Jun 19 13:07:29	InAgent	nvram sysconf_timestamp not found!	
debug	Jun 19 13:07:29	InAgent	IMSI:0123456789ABCDE	
info	Jun 19 13:07:29	InAgent	Firmware Version(1.3.0.r1773);Entity Config Timestamp(a-1275632533021);Sysconfig Timestamp(0000000000000000)	
			Clear Log Download Log File Download System Diagnosing Data	

This page shows the log of system, including download log file.

For some situation when there're some problems that can't be diagnosed at the moment, you'll be asked to provide the diagnose log to InHand engineers, you can click "Download System Diagnosing Data" then send the diagnose log to us.

3.2 Support

In case you have problems with the installation and use, please address them to us by e-mail: support@inhandnetworks.com.



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